

Draft Proposed Amendment

Please consider the following claims:

--1. (currently amended) A substrate impregnated with a volatile material comprising pyrethrum to be dispensed from the substrate, the substrate comprising:

a substrate formed from a medium having pores and passages, and having a polymeric material coating interior surfaces of the pores and passages, the substrate having a pore size of between 15 μ m and 30 μ m; and

volatile material disposed in the pores;

wherein the volatile material is more volatile than the polymeric material and the polymeric material inhibits the volatile material from clogging the substrate if the substrate is heated; and

wherein the polymeric material is selected from the group consisting of polyalkylsiloxanes and polyalkylarylsiloxanes where an alkyl group in the polysiloxane is a C₁ to C₁₀ alkyl group, phenolic materials, polyurethanes and fluorocarbon polymers.

2. (canceled)

3. (currently amended) A substrate impregnated with a volatile material comprising pyrethrum to be dispensed from the substrate, the substrate comprising:

a substrate formed from a medium having pores and passages, and having a polymeric material coating interior surfaces of the pores and passages, the substrate having a pore size of between 15 μ m and 30 μ m; and

volatile material disposed in the pores;

wherein the volatile material is more volatile than the polymeric material and the polymeric material inhibits the volatile material from clogging the substrate if the substrate is heated; and

wherein the polymeric material is selected from the group consisting of polyalkylsiloxanes and polyalkylarylsiloxanes.

4. (original) The substrate of claim 3, wherein an alkyl group in the polysiloxane is a C₁ to C₁₀ alkyl group.

5. (original) The substrate of claim 4, wherein the polysiloxane is selected from the group consisting of polydimethylsiloxane, polymethylphenylsiloxane, and polymethyloctylsiloxane.

6. (currently amended) The substrate of claim 1 ~~claim 2~~, wherein the polysiloxane has a molecular weight of 750 dalton or greater.

7. (previously presented) A substrate impregnated with a volatile material to be dispensed from the substrate, the substrate comprising:

a substrate formed from a medium having pores and passages, and having a polymeric material coating interior surfaces of the pores and passages; and

volatile material disposed in the pores;

wherein the volatile material is more volatile than the polymeric material and the polymeric material inhibits the volatile material from clogging the substrate if the substrate is heated; and

wherein the substrate is capable of being heated at 200°C so as to release at least 90 percent of the volatile material from the substrate.

8. (original) The substrate of claim 7, wherein the substrate is capable of being heated at 200°C to release at least 95 percent of the volatile material from the substrate.

9. (original) The substrate of claim 1, wherein the substrate is selected from the group consisting of wicks, mats and plugs.

10. (canceled)

11. (currently amended) The substrate of claim 1 ~~claim 10~~, wherein the medium is a ceramic.

12. (previously presented) A substrate impregnated with a volatile material to be dispensed from the substrate, the substrate comprising:

a substrate formed from a medium having pores and passages, and having a polymeric material coating interior surfaces of the pores and passages; and

volatile material disposed in the pores;

wherein the volatile material is more volatile than the polymeric material and the polymeric material inhibits the volatile material from clogging the substrate if the substrate is heated; and

wherein if the substrate is heated to 200°C for 24 hours the polymeric material therein will not have decomposed as a result thereof.

13. (canceled)

14. (currently amended) The substrate of claim 1 ~~13~~, wherein the polymeric ~~phenolic~~ material is a phenol formaldehyde.

15. (canceled)

16. (canceled)

17. (currently amended) The substrate of claim 16, wherein the polymeric material ~~fluorocarbon-polymer~~ is selected from the group consisting of polytetrafluoroethylene and polydifluoroethylene.

18. (original) The substrate of claim 1, wherein the polymeric material is less than 4% of the substrate by weight.

19. (cancelled)

20. (currently amended) The substrate of claim 3 ~~claim 1~~, wherein the medium is a ceramic.

21. (currently amended) The substrate of claim 3 ~~claim 19~~, wherein the volatile material comprises ~~is~~ a terpene.

22. (withdrawn) A method for forming a substrate impregnated with a volatile material, the substrate comprising:

a substrate formed from a medium having pores and passages, and having a polymeric material coating interior surfaces of the pores and passages; and

a volatile material disposed in the pores;

wherein the volatile material is more volatile than the polymeric material and the polymeric material inhibits the volatile material from clogging the substrate if the substrate is heated;

the method comprising:

providing the porous medium;

dissolving the polymeric material in a volatile solvent to form a solution;

allowing the solution to wick into the pores and passages; and

permitting the substrate to expel at least a portion of the volatile solvent from the substrate.

23. (withdrawn) The method of claim 22, wherein the solvent is selected from the group consisting of tetrahydrofuran, dioxane, methylene chloride, chloroform, acetone, supercritical carbon dioxide and dimethylsulfoxide.

24. (withdrawn) The method of claim 22, wherein the expelling of the solvent is aided by heat, negative pressure, and/or passing a gas over a surface of the substrate.

25. (withdrawn) The method of claim 22, wherein the medium is a ceramic medium and the polymeric material is a polysiloxane material.

26. (withdrawn) A method for forming a substrate impregnated with a volatile material, the substrate comprising:

a substrate formed from a medium having pores and passages, and having a polymeric material coating interior surfaces of the pores and passages; and

a volatile material disposed in the pores;

wherein the volatile material is more volatile than the polymeric material and the polymeric material inhibits the volatile material from clogging the substrate if the substrate is heated;

the method comprising:

mixing a polymeric material with a second material that can form a porous medium having pores and passages; and

subjecting the mixture to a process that can be used with the second material alone to form a porous medium having pores and passages.

27. (withdrawn) The method of claim 26, wherein the polymeric material is in the form of beads. --